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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,085	11/29/2001	Robert N. Fuhrman	6208-024	6102
27383 CLIFFORD C	7590 06/05/2007 HANCE US LLP	EXAMINER		
31 WEST 52ND STREET			NGUYEN, NGA B	
NEW YORK, NY 10019-6131			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)		
	09/997,085	FUHRMAN ET AL.		
Office Action Summary	Examiner	Art Unit		
	Nga B. Nguyen	3692		
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  16(a). In no event, however, may a reply be time  Till apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE	I.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).		
Status				
<ul> <li>1) Responsive to communication(s) filed on 29 No.</li> <li>2a) This action is FINAL. 2b) This</li> <li>3) Since this application is in condition for allowant closed in accordance with the practice under E.</li> </ul>	action is non-final. nce except for formal matters, pro			
Disposition of Claims				
4) Claim(s) <u>1-37</u> is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) <u>1-37</u> is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or				
Application Papers				
9) The specification is objected to by the Examiner 10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the of Replacement drawing sheet(s) including the correction of the original transfer and the correction is objected to by the Example 11) The oath or declaration is objected to by the Example 10.	epted or b) objected to by the Edrawing(s) be held in abeyance. See on is required if the drawing(s) is obj	e37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119				
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>				
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 1/21/03.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	te		

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## **DETAILED ACTION**

- This Office Action is in response to the communication filed on November 29,
   which paper has been placed of record in the file.
- 2. Claims 1-37 are pending in this application.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 31, 33, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Cherny, U.S. Patent No. 5,852,808.

Regarding to claim 31, Cherny discloses method for determining the comparability of at least two instruments, comprising the steps of:

identifying a plurality of factors associated with said at least two instruments (column 4, line 60-column 5, line 25);

determining a value for each of said plurality of factors for each of said at least two instruments (column 5, lines 50-65);

forming a covariance matrix, said covariance matrix including a weighting factor for each of said plurality of factors wherein each of said weighting factors relates to an amount of market activity attributed to said corresponding one of said plurality of factors (column 4, lines 20-47);

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determining the comparability of said at least two instruments based on said values for each of said at least two bonds and said covariance matrix (column 4, lines 1-10, e.g., the covariance of a steel company and an automobile company might be about 0.2, the covariance of a bus company and an airline would be -1.0).

Regarding to claim 33, Cherny further discloses wherein said market activity are price changes in the market for a previous period of time (column 5, lines 42-50).

Regarding to claim 37, Cherny further discloses tuning said covariance matrix by adjusting said weighting factor for at least one of said plurality of factors (column 4, lines 20-30).

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-30, 32, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cherny, U.S. Patent No. 5,852,808.

Regarding to claim 1, Cherny discloses method for determining the comparability of at least two stocks, comprising the steps of:

identifying a plurality of factors associated with said at least two stocks (column 4, line 60-column 5, line 25);

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determining a value for each of said plurality of factors for each of said at least two stocks (column 5, lines 50-65);

forming a covariance matrix, said covariance matrix including a weighting factor for each of said plurality of factors wherein each of said weighting factors relates to an amount of market activity attributed to said corresponding one of said plurality of factors (column 4, lines 20-47);

determining the comparability of said at least two stocks based on said values for each of said at least two stocks and said covariance matrix (column 4, lines 1-10, e.g., the covariance of a steel company and an automobile company might be about 0.2, the covariance of a bus company and an airline would be -1.0).

Cherny does not disclose comparing two bonds. However, bond is a well-known financial instrument. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Cherny's to replace "a stock" by "a bond", for the purpose of providing more efficiency in comparing two bonds.

Regarding to claim 2, Cherny further discloses wherein said values for said plurality of factors for each of said at least two bonds relate to sector information, bond rating information, a duration and a time to maturity (column 4, line 60-column 5, line 25).

Regarding to claim 3, Cherny does not disclose wherein said values relate to an issuer country, a put schedule, a call schedule, a sinking fund schedule, a coupon rate and an asset swap spread. However, those factors are well known in the art of bond's factors. Therefore, it would have been obvious to one with ordinary skill in the art at the

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time the invention was made to modify Cherny's to incorporate the well-known features above, for the purpose of providing more efficiency in comparing two bonds based on the values of relate to an issuer country, a put schedule, a call schedule, a sinking fund schedule, a coupon rate and an asset swap spread.

Regarding to claim 4, Cherny further discloses wherein said market activity are price changes in the market for a previous period of time (column 5, lines 42-50).

Regarding to claim 5, Cherny does not disclose wherein said period of time is in the range of one week to 1 year. However, obtaining the price changes of a bond in a period of time ranging from one week to 1 year is well known in the art. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Cherny's to incorporate the well-known feature above, for the purpose of providing more efficiency in comparing two bonds based on the price changes of a bond in a period of time ranging from one week to 1 year.

Regarding to claims 6-7, Cherny does not disclose wherein the step of determining the comparability includes the step of: determining the comparability according to the specific formulas recited in the claims. However, determining the comparability according to the specific formulas recited in the claims is well known in the art. In this case, the formulas recited in the claims depend on: the values for plurality of factors for a first of bond, the values for plurality of factors for a second of bond and the covariance matrix. Cherny discloses the values for plurality of factors for a first of bond, the values for plurality of sectors for a second of bond and the covariance matrix, thus, it is obvious in Cherny to create any specific formulas depend on those values.

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Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Cherny's to incorporate the well-known features above, for the purpose of providing more efficiency in comparing two bonds.

Regarding to claim 8, Cherny further discloses tuning said covariance matrix by adjusting said weighting factor for at least one of said plurality of factors (column 4, lines 20-30).

Claim 9 contain similar limitations found in claim 1 above, therefore, is rejected by the same rational.

Regarding to claim 10, Cherny further discloses ordering each bond in said list of bonds according to the comparability of each bond in said list of bonds to said primary bond (column 9, lines 10-40).

Claim 11 contain similar limitations found in claim 1 above, therefore, is rejected by the same rational.

Claims 12-19 contain similar limitations found in claims 1-8 above, therefore, are rejected by the same rationale.

Claims 20-29 are written in apparatus and contain similar limitations found in claims 1-8 above, therefore, are rejected by the same rationale.

Regarding to claim 30, Cherny further discloses wherein said comparability calculator executes on a computer system and further comprising an access device in communications with said computer system for issuing a comparability request to said comparability generator (figure 1 and column 10, lines 40-50, computer system 11).

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Regarding to claim 32, Cherny further discloses wherein said instruments are equities and said values for said plurality of factors for each of said at least two instruments relate to sector information, volatility, profitability measures, market capitalization (column 4, line 60-column 5, line 25). Cherny does not disclose price-to-earnings ratio. However, price-to-earnings ratio is a well-know factor of a stock. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify Cherny's to incorporate the well-known feature above, for the purpose of providing more efficiency in comparing two stocks based on price-to-earnings ratio.

Claims 34-36 contain similar limitations found in claims 5-7 above, therefore, are rejected by the same rationale.

## **Conclusion**

- 7. Claims 1-37 are rejected.
- 8. The prior arts made of record and not relied upon is considered pertinent to applicant's disclosure:

Baker (US 6,336,103) discloses a method and system for correlating an expected asset return of a portfolio to changes in future financial liabilities and also to other financial indices.

John et al (US 7,016,870) disclose identifying a recommended portfolio of financial products for an investor based upon financial products that are available to the investor.

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Garman (US 5,819,237) discloses system and method for determination of incremental value at risk for securities trading.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner Nga B. Nguyen whose telephone number is (571) 272-6796. The examiner can normally be reached on Monday-Thursday from 9:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Fischer can be reached on (571) 272-6779.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-3600.

10. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

C/o Technology Center 3600

Washington, DC 20231

Or faxed to:

(703) 872-9306 (for formal communication intended for entry),

or

(571) 273-0325 (for informal or draft communication, please label "PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to Knox building, 501 Dulany Street, Alexandria, VA, First Floor (Receptionist).

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Mga Nguyen NGA NGUYEN PRIMARY EXAMINER

May 25, 2007